



Gas Injection in Lower Cretaceous Reservoirs

Paterson, Duncan; Yan, Wei; Stenby, Erling H.

Publication date:
2017

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):

Paterson, D., Yan, W., & Stenby, E. H. (2017). *Gas Injection in Lower Cretaceous Reservoirs*. Abstract from Danish Hydrocarbon Research and Technology Centre Technology Conference 2017, Lyngby, Denmark.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Danish Hydrocarbon Research and Technology Centre Technology Conference 2017

Gas Injection in Lower Cretaceous Reservoirs

Duncan Paterson, Wei Yan, Erling H. Stenby

Center for Energy Resources Engineering, Department of Chemistry, DTU

The lower cretaceous reservoirs in the Valdemar field are low permeable chalk which are generally under-exploited. It is clear that to improve recovery additional energy must be added to the reservoir. Gas injection is preferred to water injection due to the low permeability nature of the reservoirs, and high injectivity of gas. With careful selection of the injection gas it is possible to reduce the residual oil saturation, and in the case of complete miscibility achieve 100% recovery of oil on the microscopic scale. Gas injection is considered as the only viable technical EOR technique for DUC reservoirs (according to the DUC EOR Screening Study 2013).

We will present a study into the various methods of gas injection that have been carried out in the North Sea. Along with this we will describe how the gas injection can be tuned using various injection gases to further improve the recovery.



AARHUS UNIVERSITY



UNIVERSITY OF
COPENHAGEN

Technical
University of
Denmark



GEUS



AALBORG UNIVERSITY
DENMARK